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DATE MAILED: 07/19/2005

| APPLICATION NO.  | FILING DATE   | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |  |
|--|---------------|----------------------|---------------------|------------------|--|
| 10/627,495   | 07/25/2003    | Ricky A. Hall        | FMCE-P101           | 5190             |  |
| 759  | 90 07/19/2005 |                      | EXAMINER            |                  |  |
| Henry C. Query, Jr. 504 S. Pierce Avenue Wheaton, IL 60187 |               | •                    | BEACH, TI           | BEACH, THOMAS A  |  |
|  |               |                      | . ART UNIT          | PAPER NUMBER     |  |
|  |               | •                    | 3671                |                  |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

| ·   | Application No.  | Applicant(s)                     |  |  |  |
|---|--|----------------------------------|--|--|--|
|   | 10/627,495   | HALL ET AL.                      |  |  |  |
| Office Action Summary   | Examiner   | Art Unit                         |  |  |  |
|   | Thomas A Beach   | 3671                             |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address<br>Period for Reply   |  |                                  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |  |                                  |  |  |  |
| Status  |  |                                  |  |  |  |
| 1) Responsive to communication(s) filed on  | <u>_</u> .   |                                  |  |  |  |
| <b>,</b>  | This action is <b>FINAL</b> . 2b)⊠ This action is non-final. |                                  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |  |                                  |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.   |  |                                  |  |  |  |
| Disposition of Claims   |  |                                  |  |  |  |
| 4)⊠ Claim(s) <u>1-20</u> is/are pending in the application.   |  |                                  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.  |  |                                  |  |  |  |
| 5) Claim(s) is/are allowed.   |  |                                  |  |  |  |
| 6) Claim(s) <u>1-20</u> is/are rejected.  |  |                                  |  |  |  |
| 7) Claim(s) is/are objected to.   |  |                                  |  |  |  |
| 8) Claim(s) are subject to restriction and/o  | r election requirement.                                      |                                  |  |  |  |
| Application Papers  | •  |                                  |  |  |  |
| 9)☐ The specification is objected to by the Examiner.   |  |                                  |  |  |  |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.   |  |                                  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |  |                                  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  |  |                                  |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |  |                                  |  |  |  |
| Priority under 35 U.S.C. § 119  |  |                                  |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage</li> </ul>   |  |                                  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).   |  |                                  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.  |  |                                  |  |  |  |
| Attachment(s)   |  |                                  |  |  |  |
| 1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)   |  |                                  |  |  |  |
| <ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date 01/02/04.</li> </ul>  | Paper No(s)/Mail Do 5) Notice of Informal F 6) Other:        | ate Patent Application (PTO-152) |  |  |  |

Office Action Summary

Application/Control Number: 10/627,495

Art Unit: 3671

#### **DETAILED ACTION**

#### Specification

1. The disclosure is objected to because of the following informalities: on page 5, on line 14, the US application number is missing.

Appropriate correction is required.

### Claim Rejections - 35 USC § 112

2. Claims 1, 6, 9 and 10 provide for the use of PI micro technology and Fisher-Tropsch process, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 1, 6, 9 and 10 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd.* v. *Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Agee et al 6,262,131. Agee shows a combination with a fixed offshore hydrocarbon production platform which includes a deck attached to a base that is secured to the sea floor, the improvement comprising a GTL facility for converting natural gas into a hydrocarbon liquid which having a syngas reactor for converting the natural gas into syngas (abstract), and a liquids production unit for converting the syngas into the hydrocarbon liquid; wherein at least one of the syngas reactor and the liquids production unit includes a catalyst which is constructed using PI micro-reactor technology, and wherein the GTL unit is sufficiently small to be located on the deck of the platform (col. 24, lines 26-61).

As concerns claim 2, Agee shows a gas pre-processing unit for converting the natural gas into a form which is suitable for processing by the syngas reactor (abstract).

As concerns claim 3, Agee shows the gas pre-processing unit performs at least one of the following functions on the natural gas: filtering; desulphering and dehydrating (col. 15, lines 42-54).

As concerns claim 4, Agee shows a hydrocracker unit for converting the hydrocarbon liquid into at least one hydrocarbon fuel (col. 16, line 64).

Application/Control Number: 10/627,495

Art Unit: 3671

As concerns claim 5, Agee shows the syngas reactor employs a steam reforming process to convert the natural gas into syngas (col. 18, lines 52-57).

As concerns claim 6, Agee shows a catalyst which is constructed using PI microreactor technology (col. 2, lines 5-22).

As concerns claim 7, Agee shows reticulated ceramic foam catalyst (col. 8, lies 1-46).

As concerns claim 8, Agee shows the catalyst further comprises one or more metal oxides selected from the group consisting of chromium, cobalt and nickel (col. 8, lies 1-46).

As concerns claim 9, Agee shows the liquids production unit employs a Fisher-Tropsch process to convert the syngas to the hydrocarbon liquid (abstract).

As concerns claim 10, Agee shows the liquids production unit includes a catalyst which is constructed using PI micro-reactor technology (col. 2, lines 5-22).

As concerns claim 11, Agee shows the catalyst comprises an inactive substrate having a plurality of channels formed therein (col. 8, lines 5-33).

As concerns claim 12, Agee shows the channels are coated with a Fisher-Tropsch catalyst (col. 2, lines 5-22).

As concerns claim 13, Agee shows a GTL facility for a fixed offshore hydrocarbon production platform which comprises a deck attached to a base that is secured to the sea floor, the GTL facility having a syngas reactor for converting natural gas from a subsea well into syngas (abstract), and a liquids production unit for

Application/Control Number: 10/627,495

Art Unit: 3671

converting the syngas into a hydrocarbon liquid; where the GTL unit is sufficiently small to be located on the deck of the platform (col. 24, lines 26-61).

As concerns claim 14, Agee shows at least one of the syngas reactor and the liquids production unit comprises a catalyst which is constructed using PI micro-reactor technology (col. 2, lines 5-22).

As concerns claim 15, Agee shows the syngas reactor comprises a reticulated ceramic foam catalyst (col. 8, lies 1-46).

As concerns claim 16, Agee shows the catalyst including one or more metal oxide selected from the group consisting of chromium, cobalt, and nickel (col. 8, lies 1-46).

As concerns claim 17, Agee shows the liquids production unit include an inactive substrate having a plurality of channels formed therein (col. 8, lines 5-33).

As concerns claim 18, Agee shows the channels are coated with a Fisher-Tropsch catalyst (col. 2, lines 5-22).

As concerns claim 19, Agee shows a gas pre-processing unit connvcted upstream of the syngas reactor for filtering, desulphering or dehydrating the natural gas (col. 15, lines 42-54).

As concerns claim 20, Agee shows a hydrocracker unit for converting the hydrocarbon liquid into at least one hydrocarbon fuel (col.16, line 64).

Page 6

Application/Control Number: 10/627,495

Art Unit: 3671

Conclusion

The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Thomas A Beach whose telephone number is 571-272-

6988. The examiner can normally be reached on Monday-Thursday, 8:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Thomas Will can be reached at 571-272-6998. The fax phone numbers for

the organization where this application or proceeding is assigned are 703.872.9306 for

regular communications and 703.872.9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is

703.306.4198.

Thomas A. Beach

M/y/30, 2005

THOMAS A. BEACH Patent Examiner Group 3600